Technical Data Management Business Problems

1) Reprocurement and spares acquisitions often are delayed because the Army must revalidate or reengineer product data at each procurement cycle. This leads to increased administrative lead time (ALT). The current systems in place do not have the automated means of notifying engineering of a part obsolescence or document cancellation easily prior to a package of product data being created for procurement.

2) The Army lacks the ability to easily locate and access product data from multiple repositories. In today's environment, multiple applications must be used to locate and retrieve required data. Examples of repositories in which Army product data is stored include: JEDMICS, local command or program repositories, and contractor repositories. With acquisition reform, the Army will own less data and the problem will become more severe as the Army becomes more dependent on contractors for access to data they retain.

3) Currently, configuration management information and repository storage of official product data is done by two different systems which are not linked (TD/CMS and JEDMICS respectively). The two systems are not "in sync" which can result in incorrect data being presented on reports.

4) Numerous communities, which are geographically and organizationally dispersed, must have ready access to supporting product data when evaluating the impacts of engineering change actions or when participating in integrated product development. Today, it is difficult and time consuming to access that data resulting in inadequate coordination of proposed changes.

5) The Army is facing budget cuts and staff allotments are shrinking. Given these realities, the Army must be more efficient and expeditious in controlling and maintaining the product data required to provide the soldier in the field with the commodities necessary to perform the mission at hand.

6) The Army is a diverse environment with many commands and organizations with different mission requirements. They have different infrastructures and processes. Non-standard engineering data management systems and processes significantly complicate Army consolidations due to downsizing or reorganizations. The difficulty and cost in integrating ATCOM and MICOM engineering data and data management processes illustrates this problem.

7) TD/CMS, the Army's current configuration management system, is not Year 2000 compliant. No funds have been made available to fix TD/CMS and ACMS has been touted as the solution.

8) Some contractors are either refusing to provide identifying metadata, particularly not MIL-STD-2549 data, or are charging significant amounts to provide the data.

9) Paying contractors to convert engineering models of a weapon system to raster images can be costly.

10) Major Subordinate Commands (MSCs) are receiving engineering data and metadata from contractors in multiple formats and have no resources (people) available to prepare the data for inclusion in a data management system. A corollaries to this are the following:

    - Neither the Army nor DoD have a standard format or way of buying electronic delivery of data.
    - "Intelligent" product data is not accommodated by the existing configuration management and repository systems (i.e., the data can not be retained and managed in its native or a sufficiently robust neutral format).

11) Army consumers of engineering data such as depot personnel must use multiple data management systems with different data access schemes to find needed engineering data. This lengthens the time it takes to find and retrieve data, and in some cases precludes the user from obtaining access to the data at all.

12) Different engineering data management systems and processes at each site (e.g., TD/CMS is different at each site), increases the cost, time, and complexity of site consolidations due to reorganizations and downsizing. In other words, it is costly to move data from one TD/CMS to another. Both data and corporate knowledge get lost.

13) There is a disconnect between contractor and JEDMICS repository data and government configuration management data (TD/CMS data).

14) Historically, changes to engineering data have been controlled via several approval layers. Because the hierarchical approval process lengthens the time to make changes, IPTs are being empowered to manage their own data. In some instances, this results in changes being made by individuals who are unschooled in the discipline of configuration management and can result in inadequate control of the data.

15) A lack of confidence in the ability to find and retrieve data in real-time results in multiple copies of data that users attempt to maintain on their own. As a result, the locally held data becomes out of date and considerable time is spent determining if it is the correct version.

16) Army users of engineering data have no visibility of or access to embedded software technical data.

17) The Army technical data management system needs to be able to provide engineering data to users in the format required by the user regardless of the business process the user is supporting (e.g., procurement, manufacturing, or disposal).

18) It is difficult to pull classified and unclassified engineering data together in designs because separate data management systems are required to manage classified and unclassified data.

19) The Army has the capability to perform configuration status accounting of As-Designed configurations, but has no ability to perform configuration status accounting for As-Built, As-Modified, or As-Maintained configurations. Often the As-Built data is not provided or is not updated as the result of post-deployment changes.